



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/661,587

09/15/2003

Kuo-Jung Hsu

TOP 322

8059

23995

7590

10/22/2009

RABIN & Berdo, PC

1101 14TH STREET, NW

SUITE 500

WASHINGTON, DC 20005

EXAMINER

SHERMAN, STEPHEN G

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

10/22/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/661,587	Applicant(s) HSU, KUO-JUNG	
	Examiner STEPHEN G. SHERMAN	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-8,10-13,15 and 17-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5-8,10-13,15 and 17-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 21 September 2009 has been entered. Claims 1, 5-8, 10-13, 15 and 17-22 are pending.

Response to Arguments

2. Applicant's arguments filed with respect to claims 1, 5-8, 10-13, 15 and 17-22 have been fully considered but they are not persuasive.

On pages 7-12 of the response the Applicant argues the rejection of the independent claims using Kawa in view of Gettemy et al. Specifically, the Applicant argues that the limitation "a ratio between a thickness of the housing that the receiving portion forms therein and a thickness of the housing that the receiving portion does not form therein is substantially 1/3-1/2" is not taught the references, and more specifically that this would not be an obvious design choice because the Applicant's describe in their specification specific advantages to the ratio. However, in light of a new

Art Unit: 2629

interpretation of the claims, the word “substantially” is a broad, open-ended term, and thus, since the combination of Kawa and Gettemy et al. disclose of the receiving portion being thinner than the rest of the housing, then the ratio would be between 0 and 1, and thus any value chosen to make the receiving portion thinner than the rest of the housing would result in the ratio being substantially 1/3-1/2. Therefore, in light of this new reading of the references/claims, the combination of Kawa and Gettemy et al. in fact does teach all of the limitations of the claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 2629

5. Claims 1, 7, 8, 10, 12-13, 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawa et al. (JP 2002-297309) in view of Gettemy et al. (US 7,348,964).

Regarding claim 1, Kawa et al. disclose a notebook computer with a hidden touch pad (Drawing 1), comprising:

a main portion including a housing (Drawing 1 shows body 2 which is a housing.),

wherein the housing has a first surface and a second surface and a receiving portion formed in the second surface and not exposed to the first surface (Drawing 3b and paragraph [0023] explain that the body 2 has an outside, i.e. first, surface and an inside, i.e. second, surface, where the surface shown as item 54 in the drawing has a portion for receiving the touch pad, i.e. a receiving portion.),

a display connected to the main portion in a rotatable manner (Drawing 1 shows display section 3); and

a touch pad disposed onto the receiving portion (Drawing 3b shows that touchpad portion 53 is received by the body 2.);

wherein the housing prevents the touch pad from being exposed to an atmosphere outside of the housing (Paragraph [0024]).

Kawa et al. fail to explicitly teach wherein a thickness of the housing that the receiving portion forms therein is thinner than that of the housing that the receiving portion does not form therein, and a ratio between a thickness of the housing that the

Art Unit: 2629

receiving portion forms therein and a thickness of the housing that the receiving portion does not form therein is substantially $1/3-1/2$.

Gettemy et al. discloses a housing in which an internal surface has a receiving portion, wherein a thickness of the housing that the receiving portion forms therein is thinner than that of the housing that the receiving portion does not form therein (Figure 3 shows the housing 340, where the internal surface is shown to be thinner where the touch-screen 350 is disposed than at other parts of the housing.), and a ratio between a thickness of the housing that the receiving portion forms therein and a thickness of the housing that the receiving portion does not form therein is substantially $1/3-1/2$ (As explained above and as shown in Figure 3, the receiving portion is thinner than the rest of the housing making the ratio of the thickness a value between 0 and 1, thus any value of the ratio of the thickness chosen would be "*substantially*" $1/3-1/2$).

Therefore, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to use the teachings of Gettemy et al. in the notebook computer taught by Kawa et al. such that the portion where the touchpad is received is thinner than other portions of the housing in order to facilitate better recognition of a user touching the touchpad device.

Regarding claim 7, Kawa et al. and Gettemy et al. disclose the notebook computer as claimed in claim 1.

Kawa et al. and Gettemy et al. fail to teach of the notebook computer wherein the thickness of the receiving portion is about 0.5-0.8mm.

However, since it is not shown in the specification how this specific range proves to be beneficial to the overall device, it would have been obvious to “one of ordinary skill” in the art at the time the invention was made to make the thickness of the receiving portion between .5-.8 mm since a notebook computer is portable and it is important to have the overall size of the notebook computer be relatively small meaning that all the components located inside of the computer would also need to be small.

Regarding claim 8, Kawa et al. and Gettemy et al. disclose the notebook computer as claimed in claim 1.

Kawa et al. and Gettemy et al. fail to teach of the notebook computer wherein the difference between the thickness of the receiving portion and that of a portion, adjacent to the receiving portion, of the housing is about 0.7-1.0 mm.

However, since it is not shown in the specification how this specific range proves to be beneficial to the overall device, it would have been obvious to “one of ordinary skill” in the art at the time the invention was made to make the difference between the thickness of the receiving portion and that of a portion, adjacent to the receiving portion, of the housing to be about 0.7-1.0 mm because it is important for the housing to keep a relatively small size but still be thicker than other components in the computer such that the internal components are protected properly.

Regarding claim 10, please refer to the rejection of claim 1, and furthermore the examiner understands that if the notebook computer taught by the combination of Kawa

et al. and Gettemy et al. can be made then there is method for manufacturing it that can form the housing and adhere the touchpad.

Regarding claim 12, this claim is rejected under the same rationale as claim 7.

Regarding claim 13, this claim is rejected under the same rationale as claim 8.

Regarding claim 19, Kawa et al. and Gettemy et al. disclose the notebook computer as claimed in claim 1.

Kawa et al. also disclose wherein the housing portion further includes an external surface (Drawing 3b and paragraph [0023] explain that the body 2 has the surface shown as item 54 in the drawing.).

Regarding claim 21, this claim is rejected under the same rationale as claim 19.

6. Claims 17-18, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawa et al. (JP 2002-297309) in view of Gettemy et al. (US 7,348,964) and further in view of Garner (US 6,501,462).

Regarding claim 20, Kawa et al. and Gettemy et al. disclose the notebook computer as claimed in claim 19.

Kawa et al. and Gettemy et al. fail to teach that the housing further includes a flange on the external surface, and the flange surrounds a surface corresponding to the receiving portion.

Garner discloses of a notebook computer wherein the housing further includes a flange on the external surface, and the flange surrounds the surface correspond to a receiving portion (Figure 1, item 39 and column 4, lines 5-12. The examiner interprets that item 39 is a flange which surround the touch pad portion item 35.).

Therefore it would have been obvious to “one of ordinary skill” in the art at the time the invention was made to use the flange taught by Garner with the notebook computer taught by the combination of Kawa et al. and Gettemy et al. in order to provide improved tactile feedback such that the touchpad can be found without looking for it with the eye.

Regarding claim 17, Kawa et al., Gettemy et al. and Garner disclose the notebook computer as claimed in claim 20.

Garner also discloses of a notebook computer wherein the flange on the external surface is an identifier (Figure 1, item 39 and column 4, lines 5-12, where the flange identifies where the touchpad is and therefore is an “identifier”).

Regarding claim 22, this claim is rejected under the same rationale as claim 21.

Regarding claim 18, this claim is rejected under the same rationale as claim 17.

7. Claims 5-6, 11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawa et al. (JP 2002-297309) in view of Gettemy et al. (US 7,348,964) and further in view of Keely, JR. et al. (US 2002/0063694).

Regarding claim 5, Kawa et al. and Gettemy et al. disclose the notebook computer as claimed in claim 1.

Kawa et al. and Gettemy et al. fail to teach of the notebook computer further comprising: an adhesive member adhering the touch pad to the receiving portion.

Keely, JR. et al. disclose of a notebook computer further comprising: an adhesive member adhering a touch pad to the outer surface opening (Paragraph [0041]).

Therefore it would have been obvious to “one of ordinary skill” in the art at the time the invention was made to adhere the touch pad using adhesive as taught by Keely, JR. et al. to the outer edges of the receiving portion of the notebook computer taught by the combination of Kawa et al. and Gettemy et al. in order to provide the desired stiffness, producing permanent alignment, shock control, the spread of impact forces along the edges, and liquid seal, with minimum cost, weight, and number of parts.

Regarding claim 6, Kawa et al., Gettemy et al. and Keely, JR. et al. disclose the notebook computer as claimed in claim 5.

Keely, JR. et al. also discloses wherein the touch pad is closely adjacent to the outer surface opening via the adhesive member, thereby eliminating any gap between the outer surface opening and the touch pad (Paragraph [0041]. The examiner interprets that when anything is sealed with an adhesive such that liquids are prevented from entering that the gap between the two items is eliminated.).

Regarding claim 11, this claim is rejected under the same rationale as claims 5 and 6.

Regarding claim 15, Kawa et al., Gettemy et al. and Keely, JR. et al. disclose the method as claimed in claim 10.

Kawa et al., Gettemy et al. and Keely, JR. et al. fail to teach of the method wherein the housing is formed by injection molding.

However, it would have been obvious to “one of ordinary skill” in the art at the time the invention was made to form the housing using injection molding since it is well known that the injection molding process has high production rates, allows design flexibility, has relatively low labor, and has minimum scrap losses.

Conclusion

Art Unit: 2629

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEPHEN G. SHERMAN whose telephone number is (571)272-2941. The examiner can normally be reached on M-F, 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Stephen G Sherman/
Examiner, Art Unit 2629

20 October 2009